STATEMENT OF BASIS

Tyler Union Foundry
105 West 17th Street
Anniston, Calhoun County, Alabama
301-0014

This proposed Title V Major Source Operating Permit renewal is issued under the provisions of ADEM Admin. Code R. 335-3-16. The above-named applicant has requested authorization to perform the work or operate the facility shown on the application and drawings, plans and other documents attached hereto or on file with the Air Division of the Alabama Department of Environmental Management, in accordance with the terms and conditions of this permit. Tyler Union Foundry's 3rd renewal application was due at the Department by September 13, 2016, it was received by the Department on September 1, 2016.

The significant sources of air pollutants at this facility are the following:

- 90" Cupola (EP001)
- Ductile Iron Treatment (Inoculation) (EP002)
- One (1) Disa Wheelabrator, Two (2) Wheelabrator Shotblast, One Boading Spencer Shotblast (X043) and Seven (7) Disa Grinding Stations with Shared Baghouse (EP007)
- Disamatic Mold Line, Shakeout and Sand Recycling System with Baghouse (EP006)
- Two (2) Pangborn Shotblast, One (1) Wheelabrator and Eight (8) GFD Grinding Stations with Shared Baghouse
- GFD Mold Production and Sand Recycling System with baghouse (EP005)
- Core Making Process
- No-Bake Molding Line (X042, replaced BM-1 Mold Line)(EP004)
- Coating Operations Spray Booths and Dip Lines (includes X045)
- Dust Treatment Silo with Bin Vent
- 150/300 Core Making Building
- Scrap Handling
- Sand Reclamation System with two Baghouses (was X041)
- Emergency Diesel Fired Water Suppression System (209 HP)(was X046)

The facility is allowed to operate 8760 hours per year. Based on a facility melt limit of 91,400 tons per year in the renewal Title V permit application, this facility is a potential major source for Carbon Monoxide (CO), Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAPs).

Also, this proposed renewal will incorporate five Air Permits into the Major Source Operating Permit that were issued to Union Foundry. The Air Permits being incorporated as part of the renewal Title V are the following:

X041 Sand Reclamation System with Two Baghouses, to include Lump Reducer, Thermal Reclaimer Unit, Fluidized Bed Cooler, Two Storage Silos and Two Mechanical Grinding Processes

X042 No-Bake Molding Line to include Auto Mold Making with Mixer, Sidefloor Mold Making with Mixer, Mold Release, Auto Line Dryer, Sidefloor Dryer, Auto Pouring and Cooling, Sidefloor Pouring and Cooling, Shakeout, Sand Reclamation and Preparation, Sand Silos, and Shotblast with Three Baghouses, Cyclone and Bin Vent

X043 Boading Spencer Shotblast with Disa Baghouse (EP007)

X044 The Rust inhibitor Process has been Removed not included in Title V renewal

X045 Dip Tank Coating Process including GFD Dip Line, Large Diameter Dip Line, DISA Dip Line and DISA Gland Dip line

X046 Emergency Diesel Fired Water Suppression System (209 HP)

- ***Note:*** Air Permit X041 will be under the heading Sand Reclamation System with two baghouses (EP018 & EP019), Air Permit X042 No-Bake Molding Line thet replaced the BM-1 line (EP004) in Title V renewal will be split up according to the unit emission points, the No-bake, Auto Mold Making, Sidefloor Mold Making, Mixers, Mold Release, Shakeout, Auto and Sidefloor Dryers, Pouring and Cooling to (EP004), the Sand Reclamation and Preparation to (EP020) and the Shotblast and Sand Silos to (EP007). Air Permit X043 Boading Spencer Shotblast with Disa Baghouse will be incorporated in the Disa Finishing with (EP007). Air Permit X045 Dip Tank Coating Process will be incorporated into the Coating Operations, Spray Booths and Dip Lines section of the Title V permit.

MACT Applicability

This facility is subject to the applicable requirements of 40 CFR part 63 Subpart EEEEE, *"National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries".* Tyler Union Foundry must be in compliance with the emissions limitations, work practice standards, and operation and maintenance requirements in this subpart at all times. This subpart covers emissions from 90" Cupola furnace, and pouring stations (Disa, GFD, and BM1

lines) at Tyler Union Foundry. The mold lines (Disa, GFD, and BM1) are "green sand" mold lines. The core making lines on March 10, 2008, switched from Triethylamine (TEA) to Dimethyl Isopropyl Alcohol (DMIPA) as a catalyst and is no longer subject to the MACT. This subpart also covers fugitive emissions from foundry operations.

Also, this facility is subject to the applicable requirements of 40 CFR part 63 Subpart MMMM, "*National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products"*. This subpart covers the spray paint booths and painting operations located at Tyler Union Foundry. To determine compliance with this subpart, the facility must use at least one of three compliance options: compliant material option, emission rate without add-on controls option, emission rate with add-on controls option.

Production Process Overview

Tyler Union Foundry, located in Anniston, Alabama, is a ductile iron water main foundry. Scrap metal, coke, and other materials are loaded into a charge bucket to charge the cupola. Molten metal flows from the cupola to the bubble pot where slag is removed from the iron. The metal is treated to remove sulfur and stored until needed in the three molding lines. After the molds are cooled, they are transferred to the shakeout lines. Tyler Union Foundry has three DMIPA core lines and 2 Air Set core making lines. The facility uses several shotblast machines and grinding booths for finishing of the castings. Tyler Union produces castings which are used to convey potable water.

90" ID Water Cooled Cupola Furnace (48 TPH) with Afterburner and ETA 2000 Baghouse (EP001)

Emission Standards

- **Particulate Matter Emissions Standard:**

    1. Particulate matter emissions from the 90" Cupola Furnace shall not exceed the allowable as set by Rule 335-3-4-.04.

        $E=3.59(P)^{0.62}$ (P < 30 tons per hour)
        $E=17.31(P)^{0.16}$ (P ≥ 30 tons per hour)
        Where E= Emissions in pounds per hour
        P= Process weight per hour in tons per hour

        ADEM Admin. Code R. 335-3-4-.04(1)

2. Particulate matter emissions from the cupola furnace shall not exceed 0.006 gr/dscf or, alternatively, metal hazardous air pollutants emissions shall not exceed 0.0005 gr/dscf.

   40 CFR §63.7690 (a) (2) Subpart EEEEE

3. The facility must comply with the scrap certification or scrap selection and inspection program specified in 40 CFR §63.7700.

   40 CFR §63.7700 Subpart EEEEE

- **Carbon Monoxide Emissions Standards:**

  The facility shall not emit the carbon monoxide gases generated during the operation of a gray iron cupola unless they are burned at 1300°F for 0.30 seconds in a direct flame afterburner.

  ADEM Admin. Code R. 335-3-7-.01

- **Organic Hazardous Air Pollutant (HAP) Emissions Standards:**

1. This unit must not discharge emissions of volatile organic hazardous air pollutants (VOHAP) through a conveyance to the atmosphere that exceed 20 parts per million by volume (ppmv) corrected to 10 percent oxygen.

   40 CFR §63.7690 (a) (8) Subpart EEEEE

2. The facility must install, operate, and maintain a capture and collection system for sources subject to VOHAP emissions limit in accordance with §63.7690 (b) (1).

3. The facility must operate each combustion device applied to emissions from a cupola metal melting furnace subject to the emissions limit for VOHAP such that the 15-minute average combustion zone temperature does not fall below 1,300 degrees Fahrenheit (°F). Periods when the cupola is off blast and for 15 minutes after going on blast from an off blast conditions are not included in the 15-minute average.

   40 CFR §63.7690 (b) (3) Subpart EEEEE

- **Opacity Standards:**

1. Unless otherwise specified in the Unit Specific provisos of this

permit, any source of particulate matter emissions shall not discharge more than one 6-minute average opacity greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate matter emissions greater than 40%. Opacity will be determined by 40 CFR Part 60, Appendix A, Method 9, unless otherwise specified in the Unit Specific provisos of this permit.

ADEM Admin. Code R. 335-3-4-.01(1)

2. Each building or structure housing any emission source must not discharge any fugitive emissions to the atmosphere that exhibit opacity greater than 20 percent (6-minute average); except for one 6-minute average per hour that does not exceed 27 percent opacity.

   40 CFR §63.7690 (a) (7) Subpart EEEEE

Expected Emissions

- **Particulate Matter Emissions:**

  The expected particulate matter emissions from the cupola are 3.30 lbs/hr (0.00026 gr/dscf). This is based on facility's calculations using FIRE Version 6.25 and a cupola stack test data.

- **Carbon Monoxide Emissions:**

  The expected carbon monoxide emissions from this unit are 157.91 lbs/hr. This is based on facility's calculations using FIRE Version 6.25 and cupola stack test data.

- **Nitrogen Oxide Emissions:**

  The expected nitrogen oxide emissions from this unit are 33.21 lbs/hr. This is based on facility's calculations using cupola stack test data.

- **Sulfur Dioxide Emissions:**

  The expected sulfur dioxide emissions from this unit are 68.06 lbs/hr. This is based on facility's calculations using cupola stack test data.

- **Volatile Organic Compound Emissions:**

  The expected volatile organic compound emissions from this unit are 2.18 lbs/hr. This is based on facility's calculations using FIRE Version 6.25 and cupola stack test.

- **Volatile Organic Hazardous Air Pollutant Emissions:**

  The expected VOHAP emissions from this unit are 0.495 lb/hr (0.017 ppmv). This is based on facility calculations, 61,096 dscfm (95,000 acfm @ 361°F exit stack temp), and molecular weight of benzene.

- **Lead Emissions:**

  The expected lead emissions from this unit are 0.002 lbs/hr. This is based on facility's calculations using FIRE Version 6.25 and cupola stack test data.

Periodic Monitoring, Recordkeeping and Reporting

- **Particulate Matter/Opacity Emissions:**

  1. The capture system associated with this unit must comply with the operation and maintenance requirements specified in 63.7710.

     40 CFR §63.7710 Subpart EEEEE

  2. The facility must comply with the applicable monitoring requirements as specified in 40 CFR §63.7740, §63.7741, and §63.7742.

     40 CFR §63.7740, §63.7741, and §63.7742 Subpart EEEEE

  3. The facility must comply with the applicable notifications, reports, and records requirements as specified in §63.7750, §63.7751, §63.7752, and §63.7753.

     40 CFR §63.7750, §63.7751, §63.7752, and §63.7753 Subpart EEEEE

  Compliance Assurance Monitoring (CAM)-Particulate Matter

  This unit has potential pre-control particulate matter emissions greater than the major source amount which is controlled by a

baghouse. The monitoring required by the MACT Subpart EEEEE will satisfy the CAM requirement.

- **Carbon Monoxide Emissions:**

1. The facility shall monitor and record continuously, the afterburner combustion zone temperature.

2. A normal operating range of total combustion tuyere airflow to the 90" Cupola Furnace shall be established by the facility and shall monitor and record, continuously, the total combustion tuyere airflow to the 90" Cupola Furnace.

Ductile Iron Production (Inoculation) with Capture Hood and ETA Baghouse (EP002)

Emissions Standards

- **Particulate Matter Emissions Standard:**

1. Particulate matter emissions from this unit shall not exceed the lesser of the Anti-PSD limit of 16.0 TPY or the allowable as set by Rule 335-3-4-.04.

   ADEM Admin. Code R. 335-3-14-.04 (Anti-PSD)

   and

   $E=3.59(P)^{0.62}$ ($P < 30$ tons per hour)
   $E=17.31(P)^{0.16}$ ($P \geq 30$ tons per hour)
   Where E= Emissions in pounds per hour
   P= Process weight per hour in tons per hour

   ADEM Admin. Code R. 335-3-4-.04(1)

2. The amount of gray iron treated to produce ductile iron shall not exceed 91,400 tons per year.

   ADEM Admin. Code R. 335-3-14-.04 (Anti-PSD)

- **Opacity Standard:**

1. Unless otherwise specified in the Unit Specific provisos of this permit, any source of particulate matter emissions shall not discharge more than one 6-minute average opacity greater than

20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate matter emissions greater than 40%. Opacity will be determined by 40 CFR Part 60, Appendix A, Method 9, unless otherwise specified in the Unit Specific provisos of this permit.

ADEM Admin. Code R. 335-3-4-.01(1)

2. Each building or structure housing any emission source must not discharge any fugitive emissions to the atmosphere that exhibit opacity greater than 20 percent (6-minute average); except for one 6-minute average per hour that does not exceed 27 percent opacity.

   40 CFR §63.7690 (a) (7) Subpart EEEEE

Expected Emissions

- **Particulate Matter Emissions:**

  The expected particulate matter emissions from this process are 0.08 lbs/hr. This is based on facility's calculations using FIRE Version 6.25 and stack test data.

Periodic Monitoring, Recordkeeping and Reporting

- **Particulate Matter/Opacity Emissions:**

  1. The facility must comply with the monitoring requirements specified in 40 CFR §63.7740 (a & b), §63.7741 (a & b), and §63.7742 (a – c) as applicable.

     40 CFR §63.7740, §63.7741, and §63.7742 Subpart EEEEE

  2. The facility must comply with the notifications, reports, and records requirements specified in §63.7750, §63.7751 (a-d), §63.7752 (a –c), and §63.7753 (a –c) as applicable.

     40 CFR §63.7750, §63.7751, §63.7752, and §63.7753 Subpart EEEEE

Compliance Assurance Monitoring (CAM)

This unit not is subject to Compliance Assurance Monitoring (CAM); it does not have the pre-controlled potential to emit a pollutant in amounts that would exceed major source threshold.

Disa Finishing; One (1) Disa Wheelabrator, Two (2) Wheelabrator Double Door Shotblasts, One (1) Boading Spencer Shotblast, Seven (7) Disa Grinding Stations and Sand Silos with shared Baghouse and afterfilter (EP007)

Note: This unit was re-permitted in 2004 to replace an existing baghouse. An afterfilter was also installed on this unit to allow the exhaust flow to be introduced inside the foundry during the winter months and possibly during the summer months dependent of the air make-up. Air make-up from this system will be dispersed above the Disa Mold line Aisco Drum to help prevent blockage in the ductwork. The afterfilter systems would remove 85% of 1 micron material prior to being reintroduced. This system is equipped with a pressure gauge to monitor the afterfilter to ensure that there would not be any blockage. The facility proposed a logbook to track date and number of hours the afterfilter is used.

Emission Standards

- **Particulate Matter Emissions Standards:**

1. Particulate matter emissions from the One (1) Disa Wheelabrator, Two (2) Wheelabrator Shotblast, One (1) Boading Spencer Shotblast, Seven (7) Disa Grinding Stations and Sand Silos combined shall not exceed 8.7 lbs/hr out the baghouse stack (EP007) as measured in accordance with 40 CFR Part 60 (latest edition) Method 5.

ADEM Admin. Code R. 335-3-14-.04 (Anti-PSD)

- **Opacity Standards:**

1. Unless otherwise specified in the Unit Specific provisos of this permit, any source of particulate matter emissions shall not discharge more than one 6-minute average opacity greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate matter emissions greater than 40%. Opacity will be determined by 40 CFR Part 60, Appendix A, Method 9, unless otherwise specified in the Unit Specific provisos of this permit.

ADEM Admin. Code R. 335-3-4-.01(1)

2. Each building or structure housing any emission source must not discharge any fugitive emissions to the atmosphere that exhibit opacity greater than 20 percent (6-minute average); except for one 6-minute average per hour that does not exceed 27 percent opacity.

   40 CFR §63.7690 (a) (7) Subpart EEEEE

Expected Emissions

- **Particulate Matter Emissions:**

  Expected particulate matter emissions from this are 1.34 lbs/hr. This is based on facility's calculations using FIRE Version 6.25 an Inventory of Iron Foundry Emissions, modern Castings, January 1972, p46, emissions for PM< 50 microns in size.

Compliance Assurance Monitoring (CAM)

This unit is subject to Compliance Assurance Monitoring (CAM); it has the pre-controlled potential to emit a pollutant in amounts that would exceed major source threshold. See the Appendix-Table 5 for the CAM.

Periodic Monitoring, Recordkeeping and Reporting

- **Opacity Emissions**

1. The facility shall perform a visual check, once per day, of the baghouse associated with this system. This check shall be performed by a person familiar with Method 9. If instantaneous visible emissions in excess of 10% opacity are noted, and are not corrected within a period of 1 hour, then a Method 9 must be performed within 4 hours of the observations. Maintenance shall be performed as needed. Any repairs or observed problems shall be recorded.

2. If a visible emissions observation is required using 40 CFR, Part 60, Appendix A, Method 9, the results will be documented using an ADEM visible emissions observation report and the cause and corrective action taken will be documented in a logbook.

3. The facility shall establish a normal operating pressure range and shall monitor and record the pressure drop across the baghouse once per day.

4. The facility shall perform a weekly inspection of the baghouse to verify proper operation. The following activities shall be performed.

   (a) Once per week check hopper, fan and cleaning cycle for proper operation.
   (b) Once per week a visual check of all hoods and ductwork.

5. The facility shall perform an annual inspection of the baghouse to verify proper operation. The following activities shall be performed.

   (a) Once per year inspect baghouse structure, access doors, door seals, and bags.
   (b) Once per year perform an internal inspection of the baghouse hoppers.

6. The facility shall monitor the hours of operation of the afterfilter. The date and time of the afterfilter operation shall be recorded and maintained for a period of 5 years.

7. The facility shall establish a normal operating pressure range for the afterfilter and shall monitor and record the pressure drop across the afterfilter when in operation. Records shall be maintained for 5 years.

Compliance Assurance Monitoring (CAM)-Particulate Matter

This unit does not have the potential pre-control particulate matter emissions greater than the major source amount. CAM is not applicable to this unit for the particulate matter emissions.

Note: The seven Disa Grinders are not subject to CAM but will be using the same Appendix-Table 5 (In Statement of Basis) requirements that the Disa Wheelabrator, two Wheelabrators, and Boading Spencer Shotblast are subject to because the Monitoring and Record Keeping Requirements under Rule 335-3-16-.05 are the same as the requirements in the CAM Plan for the Wheelabrators.

Disamatic Mold Line and Sand Recycling System with Baghouse (EP006)

Note: This unit consists of pouring, cooling, shakeout, prepared sand system, returned sand system, and the casting handling. This unit was re-permitted to replace an existing wet scrubber and baghouse on the mold line with a new baghouse. This re-permitting combined EP003 (Disamatic Mold line Shakeout with Multi-wash Cyclonic separator) and EP006 (Disamatic Mold line and Sand Recycling System with Baghouse) into emission point 006.

Note: This mold unit is a "green sand" mold unit. § 63.7765 of subpart EEEEE states that lines for making green sand molds or cores are not included in the definition of mold or core making line. The pouring stations are subject to emission limitations under the above mentioned subpart.

Emission Standards

- **Particulate Matter Emissions Standard:**

1. Particulate matter emissions from this system shall not exceed the lesser of the Anti-PSD limit of 9.5 lbs/hr measured in accordance with as found in Appendix A of 40 CFR 60 (latest edition) Method 5 or the process weight allowable.

   ADEM Admin. Code R. 335-3-14-.04 (Anti-PSD)

or

$E=3.59(P)^{0.62}$ ($P < 30$ tons per hour)
$E=17.31(P)^{0.16}$ ($P \geq 30$ tons per hour)
Where E= Emissions in pounds per hour
P= Process weight per hour in tons per hour

ADEM Admin. Code R. 335-3-4-.04(1)

2. This unit shall not operate more than 4,750 hours in any consecutive twelve month period. The facility must keep records showing monthly and 12-month rolling total of hours of operation. The records shall be kept in a form suitable for inspection for a period of 5 years.

   ADEM Admin. Code R. 335-3-14-.04 (Anti-PSD)

3. Particulate matter emissions from each pouring station shall not exceed 0.010 gr/dscf or, alternatively, metal hazardous air pollutants emissions shall not exceed 0.0008 gr/dscf.

   40 CFR §63.7690 (a)(5) Subpart EEEEE

- **Opacity Standard:**

1. Unless otherwise specified in the Unit Specific provisos of this permit, any source of particulate matter emissions shall not discharge more than one 6-minute average opacity greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate matter emissions greater than 40%. Opacity will be determined by 40 CFR Part 60, Appendix A, Method 9, unless otherwise specified in the Unit Specific provisos of this permit.

   ADEM Admin. Code R. 335-3-4-.01(1)

2. Each building or structure housing any emission source must not discharge any fugitive emissions to the atmosphere that exhibit opacity greater than 20 percent (6-minute average); except for one 6-minute average per hour that does not exceed 27 percent opacity.

   40 CFR §63.7690 (a) (7) Subpart EEEEE

Expected Emissions

- **Particulate Matter Emissions:**

  The expected particulate matter emissions from this process are 4.12 lbs/hr (18.03 TPY). This is based on facility's calculations using FIRE Version 6.25.

Periodic Monitoring and Reporting

- **Particulate Matter/Opacity Emissions:**

1. The capture system associated with these units must comply with the operation and maintenance requirements specified in 63.7710.

   40 CFR §63.7710 Subpart EEEEE

2. The facility must comply with the applicable initial compliance requirement specified in 40 CFR §63.7730 through 63.7736.

   40 CFR §63.7730 through §63.7736 Subpart EEEEE

3. The facility must comply with the applicable monitoring requirements specified in 40 CFR §63.7740, §63.7741, and §63.7742.

   40 CFR §63.7740, §63.7741, and §63.7742 Subpart EEEEE

4. The facility must comply with the applicable notifications, reports, and records requirements specified in §63.7750, §63.7751, and §63.7752.

   40 CFR §63.7750, §63.7751, and §63.7752 Subpart EEEEE

Compliance Assurance Monitoring (CAM)

The mold line is subject to Compliance Assurance Monitoring (CAM); it has the pre-controlled potential to emit a pollutant in amounts that would exceed major source threshold. See the Appendix-Table 4 for the facility's CAM plan.

GFD Mold Production and Sand Recycling System with Baghouse (EP005)

Note: This unit consists of pouring, cooling, shakeout, prepared sand system, returned sand system, and the casting handling.

Note: This mold unit is a "green sand" mold unit. § 63.7765 of subpart EEEEE states that lines for making green sand molds or cores are not included in the definition of mold or core making line. The pouring stations are not subject to emission limitations under the above mentioned subpart. Pouring stations are not controlled by the baghouse associated with this unit. Since there is no conveyance system associated with the pouring stations, there are no applicable requirements for the Iron and Steel Foundries MACT other than building opacity.

Emission Standards

- **Particulate Matter Emissions Standard:**

  1. Particulate matter emissions from this system shall not exceed the lesser of the Anti-PSD limit of 5.0 lbs/hr or the allowable as set by rule 335-3-4-.04.

ADEM Admin. Code R. 335-3-14-.04 (Anti-PSD)

or

$E=3.59(P)^{0.62}$ (P < 30 tons per hour)
$E=17.31(P)^{0.16}$ (P ≥ 30 tons per hour)
Where E= Emissions in pounds per hour
P= Process weight per hour in tons per hour

ADEM Admin. Code R. 335-3-4-.04(1)

- **Opacity Standard:**

1. Unless otherwise specified in the Unit Specific provisos of this permit, any source of particulate matter emissions shall not discharge more than one 6-minute average opacity greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate matter emissions greater than 40%. Opacity will be determined by 40 CFR Part 60, Appendix A, Method 9, unless otherwise specified in the Unit Specific provisos of this permit.

   ADEM Admin. Code R. 335-3-4-.01(1)

2. Each building or structure housing any emission source must not discharge any fugitive emissions to the atmosphere that exhibit opacity greater than 20 percent (6-minute average); except for one 6-minute average per hour that does not exceed 27 percent opacity.

   40 CFR §63.7690 (a) (7) Subpart EEEEE

Expected Emissions

- **Particulate Matter Emissions:**

The expected particulate matter emissions from this process are 2.59 lbs/hr (11.33 TPY). This is based on facility calculations using Fire Version 6.25 and operating 8760 hours per year with a baghouse control of 99.25 %.

Periodic Monitoring

- **Particulate Matter/Opacity Emissions:**

  Compliance Assurance Monitoring (CAM)

  The mold line is subject to Compliance Assurance Monitoring (CAM); it has the pre-controlled potential to emit a pollutant in amounts that would exceed major source threshold. See the Appendix-Table 3 for the facility's CAM plan.

No-Bake Mold Process to include; Auto Mold Making with Mixer, Sidefloor Mold Making with mixer, Mold Release, Auto Line Dryer, Auto Pouring and Cooling, Sidefloor Pouring and Cooling, Shakeout, Cyclone, and Baghouse (EP004) Sand Reclamation and Preparation and Baghouse(EP020)

Note: This Process consists of No-Bake Moldmaking, Auto Mold Making, Pouring, cooling, Auto and Sidefloor Dryers, Mold Release, Shakeout, Auto & Sidefloor Pouring, and the casting handling.

Note: This mold unit is a "green sand" mold unit. § 63.7765 of subpart EEEEE states that lines for making green sand molds or cores are not included in the definition of mold or core making line. The pouring stations are subject to emission limitations under the above mentioned subpart.

Note: The Sand Reclamation System is a Mechanical Unit not Thermal Unit, Therefore, not subject to 40 CFR 63 Subpart UUU – Standards of Performance for Calciners and Dryers in Mineral Industries.

Emission Standards

- **Particulate Matter Emissions Standard:**

  1. Particulate matter emissions from the Pouring, Shakeout and Mixers (EP004) shall not exceed the lesser of the Anti-PSD limit of 9.5 lbs/hr or the allowable as set by rule 335-3-4-.04.

     ADEM Admin. Code R. 335-3-14-.04 (Anti-PSD)

     or

     $E=3.59(P)^{0.62}$ (P < 30 tons per hour)
     $E=17.31(P)^{0.16}$ (P ≥ 30 tons per hour)
     Where E= Emissions in pounds per hour
     P= Process weight per hour in tons per hour

ADEM Admin. Code R. 335-3-4-.04(1)

2. Particulate matter emissions from the Sand Reclamation and Preparation System (EP020) shall not exceed the lesser of the Anti-PSD limit of 8.7 lbs/hr or the allowable as set by rule 335-3-4-.04.

   ADEM Admin. Code R. 335-3-14-.04 (Anti-PSD)

   or

   $E=3.59(P)^{0.62}$ (P < 30 tons per hour)
   $E=17.31(P)^{0.16}$ (P ≥ 30 tons per hour)
   Where E= Emissions in pounds per hour
   P= Process weight per hour in tons per hour

   ADEM Admin. Code R. 335-3-4-.04(1)

3. Particulate matter emissions from each pouring station shall not exceed 0.010 gr/dscf or, alternatively, metal hazardous air pollutants emissions shall not exceed 0.0008 gr/dscf.

   40 CFR §63.7690 (a)(5) Subpart EEEEE

- **Opacity Standard:**

1. Unless otherwise specified in the Unit Specific provisos of this permit, any source of particulate matter emissions shall not discharge more than one 6-minute average opacity greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate matter emissions greater than 40%. Opacity will be determined by 40 CFR Part 60, Appendix A, Method 9, unless otherwise specified in the Unit Specific provisos of this permit.

   ADEM Admin. Code R. 335-3-4-.01(1)

2. Each building or structure housing any emission source must not discharge any fugitive emissions to the atmosphere that exhibit opacity greater than 20 percent (6-minute average); except for one 6-minute average per hour that does not exceed 27 percent opacity.

   40 CFR §63.7690 (a) (7) Subpart EEEEE

Expected Emissions

- **Particulate Matter Emissions:**

  The expected particulate matter emissions from this process are 0.56 lbs/hr (2.46 TPY). This is based on facility calculations using Fire Version 6.25 and operating 8760 hours per year with a baghouse control of 99.25 %.

Periodic Monitoring

- **Particulate Matter/Opacity Emissions:**

  1. The capture system associated with these units must comply with the operation and maintenance requirements specified in 63.7710.

     40 CFR §63.7710 Subpart EEEEE

  2. The facility must comply with the applicable initial compliance requirement specified in 40 CFR §63.7730 through 63.7736.

     40 CFR §63.7730 through §63.7736 Subpart EEEEE

  3. The facility must comply with the applicable monitoring requirements specified in 40 CFR §63.7740, §63.7741, and §63.7742.

     40 CFR §63.7740, §63.7741, and §63.7742 Subpart EEEEE

  4. The facility must comply with the applicable notifications, reports, and records requirements specified in §63.7750, §63.7751, and §63.7752.

     40 CFR §63.7750, §63.7751, and §63.7752 Subpart EEEEE

Compliance Assurance Monitoring (CAM)

This unit is not subject to Compliance Assurance Monitoring (CAM); it does not have the pre-controlled potential to emit a pollutant in amounts that would exceed major source threshold.

Core Making Process with Packed Bed Scrubbers (EP010, EP011, EP012)

Note: This process consists of the Disa Core Machine (L-40, L-50, L-70), BMD core machine (L-120), and the GFD Core Machines (L-200). The L-40, L-50, L-70, L-120, and L-200 are no longer TEA core making lines. Therefore, the core making lines are no longer subject to the requirements specified in the Iron and Steel Foundries MACT (Subpart EEEEE). The Tyler Union Foundry Core Making process switched to Dimethyl Isopropyl Alcohol (DMIPA) as a catalyst on March 10, 2008.

Emissions Standards

- **Particulate Emission Standard**

1. Particulate emissions from the core making process scrubber shall not exceed the process weight allowable.

   $E = 3.59\ (P)^{0.62}$ $(P < 30$ tons/hr)
   $E = 17.31(P)^{0.16}$ $(P \geq 30$ tons/hr)
   Where E = Emissions in pounds per hour
   P = Process weight per hour in tons per hour

   ADEM Admin. Code R. 335-3-4-.04-(1)

- **Opacity Standards**

1. Unless otherwise specified in the Unit Specific provisos of this permit, any source of particulate matter emissions shall not discharge more than one 6-minute average opacity greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate matter emissions greater than 40%. Opacity will be determined by 40 CFR Part 60, Appendix A, Method 9, unless otherwise specified in the Unit Specific provisos of this permit.

   ADEM Admin. Code R. 335-3-4-.01(1)

Expected Emissions

- **Volatile Organic Compound Emissions:**

The expected volatile organic compound emissions from the packed bed scrubber are 1.02 lb/hr or 1.63 tpy. This is based on AP-42 emission factors, 8,760 operating hours per year, and a control efficiency of 99%.

Periodic Monitoring

1. The facility must monitor column differential pressure for each scrubber.

2. The differential pressure shall be in the range of 0.1 to 2.5 inches of water.

ADEM Admin. Code R. 335-3-16-.05

Recordkeeping and Reporting

1. The permittee shall maintain a record of all inspections, to include visible observations and Method 9 observations performed to satisfy the requirements of periodic monitoring. This shall include all problems observed and corrective actions taken. Each record shall be maintained for a period of 5 years.

Rule 335-3-16-.05

2. If a visible emission observation is required using the 40 CFR, Part 60, Appendix A, Method 9, the results will be documented using an ADEM visible emissions observation report and the cause and corrective action taken will be documented in a form suitable for inspection.

Rule 335-3-16-.05

3. The permittee shall keep accurate and understandable records of pH and column differential pressure which records at least the last five years of data. The data will be maintained in a form suitable for inspection and be available upon request.

Rule 335-3-16-.05 (c)

Compliance Assurance Monitoring (CAM)-Particulate Matter

This unit does not have the potential pre-control particulate matter emissions greater than the major source amount. CAM is not applicable to this unit for the particulate matter emissions.

Cupola Dust Treatment Silo with Bin Vent (EP015)

Emission Standards

- **Particulate Matter Emissions Standards:**

  Particulate matter emissions from this unit shall not exceed the lesser of the Anti-PSD limit of 0.80 lbs/hr or the allowable as set by rule 335-3-4-.04.

  ADEM Admin. Code R. 335-3-14-.04 (Anti-PSD)

  or

  $E=3.59(P)^{0.62}$ (P < 30 tons per hour)
  $E=17.31(P)^{0.16}$ (P ≥ 30 tons per hour)
  Where E= Emissions in pounds per hour
  P= Process weight per hour in tons per hour
  ADEM Admin. Code R. 335-3-4-.04(1)

- **Opacity Standards:**

  1. This source shall not emit particulate matter of opacity of more than one 6-minute average greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate matter emissions greater than 40%.

  ADEM Admin. Code R. 335-3-4-.01(1)

Expected Emissions

- **Particulate Matter Emissions:**

  The expected particulate matter emissions on this unit are 0.66 lbs/hr (2.89 TPY). This is based on facility calculations using the maximum precoat usage and a bin vent efficiency of 99.5%.

Periodic Monitoring

- **Particulate Matter/Opacity Emissions:**

  1. The facility shall perform a visual check, weekly and during loading of the silo, of the bin vent associated with this unit. This check shall be performed by a person familiar with Method 9. If instantaneous visible emissions in excess of 10% opacity are observed, and are not corrected within a period of **15 minutes**, then a Method 9 must be

performed within 1 hour of the observations. Maintenance shall be performed as needed. Any repairs or observed problems shall be recorded.

Recordkeeping and Reporting

1. The permittee shall maintain a record of all inspections, to include visible observations and Method 9 observations performed to satisfy the requirements of periodic monitoring. This shall include all problems observed and corrective actions taken. Each record shall be maintained for a period of 5 years.

   Rule 335-3-16-.05

2. If a visible emission observation is required using the 40 CFR, Part 60, Appendix A, Method 9, the results will be documented using an ADEM visible emissions observation report and the cause and corrective action taken will be documented in a form suitable for inspection.

   Rule 335-3-16-.05

Compliance Assurance Monitoring (CAM)-Particulate Matter

This unit does not have the potential pre-control particulate matter emissions greater than the major source amount. CAM is not applicable to this unit for the particulate matter emissions.

150/300 Core Making Building (EP016)

Emission Standards

- **Particulate Matter Emissions Standards:**

  Particulate matter emissions from this unit shall not exceed the lesser of the Anti-PSD limit of 0.40 lbs/hr or the allowable as set by rule 335-3-4-.04.

  ADEM Admin. Code R. 335-3-14-.04 (Anti-PSD)

  or

  $E=3.59(P)^{0.62}$ ($P < 30$ tons per hour)
  $E=17.31(P)^{0.16}$ ($P \geq 30$ tons per hour)

Where E= Emissions in pounds per hour
P= Process weight per hour in tons per hour

ADEM Admin. Code R. 335-3-4-.04(1)

- **Opacity Standards:**

1. This source shall not emit particulate matter of opacity of more than one 6-minute average greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate matter emissions greater than 40%.

ADEM Admin. Code R. 335-3-4-.01(1)

Expected Emissions

- **Particulate Matter Emissions:**

The expected particulate matter emissions on this unit are 0.17 lbs/hr (0.74 TPY). This is based on facility calculations using the maximum precoat usage and a bin vent efficiency of 99.5%.

Periodic Monitoring

- **Particulate Matter/Opacity Emissions:**

1. The facility shall perform a visual check, once per day, of the bin vent associated with this unit. This check shall be performed by a person familiar with Method 9. If instantaneous visible emissions in excess of 10% opacity are noted, and are not corrected within a period of **15 minutes**, then a Method 9 must be performed within 1 hour of the observations. Maintenance shall be performed as needed. Any repairs or observed problems shall be recorded.

- **Opacity:**

2. The permittee shall perform a visual check on the bin vent at least once per day. This check shall be performed by a person familiar with Method 9. If visible emissions in excess of 10% are noted and not corrected within a period of 15 minutes, then a Method 9 shall be performed within 4 hours of the observations.

Recordkeeping and Reporting

1. The permittee shall maintain a record of all inspections, to include visible observations and Method 9 observations performed to satisfy the requirements of periodic monitoring. This shall include all problems observed and corrective actions taken. Each record shall be maintained for a period of 5 years.

   Rule 335-3-16-.05

2. If a visible emission observation is required using the 40 CFR, Part 60, Appendix A, Method 9, the results will be documented using an ADEM visible emissions observation report and the cause and corrective action taken will be documented in a form suitable for inspection.

   Rule 335-3-16-.05

Compliance Assurance Monitoring (CAM)-Particulate Matter

This unit does not have the potential pre-control particulate matter emissions greater than the major source amount. CAM is not applicable to this unit for the particulate matter emissions.

GFD Line; Two Pangborn Shotblasts (15 TPH, each), One Wheelabrator Shotblast (15 TPH) and 8 Grinding Stations with Shared Baghouse (EP003)

Emission Standards

- **Particulate Matter Emissions Standard:**

1. Particulate matter emissions from the Two Pangborn Shotblasts and the One Wheelabrator Shotblast units combined shall not exceed the lesser of the Anti-PSD limit of 14.5 TPY and 0.34 lbs/ton of castings (Pangborns) and 14.5 TPY and 0.17 lbs/ton of castings (Wheelabrator) or the allowable as set by rule 335-3-4-.04.

   ADEM Admin. Code R. 335-3-14-.04 (Anti-PSD)

   or

   $E=3.59(P)^{0.62}$ $(P < 30$ tons per hour)
   $E=17.31(P)^{0.16}$ $(P \geq 30$ tons per hour)
   Where E= Emissions in pounds per hour
   P= Process weight per hour in tons per hour

ADEM Admin. Code R. 335-3-4-.04(1)

The total amount of castings processed through the Two Pangborn Shotblasts shall not exceed **84,972 tons per year** and The One Wheelabrator Shotblast shall not exceed **169.944 tons per year** in any 12-month period.

Particulate emissions from the eight Grinding Stations shall not exceed the lesser of the Anti-PSD combined particulate emissions limit of 5.0 lb/hr (21.0 tpy) or the process weight allowable.

ADEM Admin. Code R. 335-3-14-.04 (Anti-PSD)

- **Opacity Standard:**

1. This source shall not emit particulate matter of opacity of more than one 6-minute average greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate matter emissions greater than 40%.

   ADEM Admin. Code R. 335-3-4-.01(1)

2. Each building or structure housing any emission source must not discharge any fugitive emissions to the atmosphere that exhibit opacity greater than 20 percent (6-minute average); except for one 6-minute average per hour that does not exceed 27 percent opacity.

   40 CFR §63.7690 (a) (7) Subpart EEEEE

Expected Emissions

- **Particulate Matter Emissions:**

The expected particulate matter emissions on the Pangborn units are 3.3 lbs/hr (14.5 TPY). This is based on the maximum production of 84,972 TPY of castings and AP-42 emission factors.

The expected particulate matter emissions from the Wheelabrator unit are 2.55 lbs/hr (11.7 TPY). This is based on the maximum production of 169,944 TPY of castings and AP-42 emission factors.

The expected particulate emissions from the eight Grinding Stations are 0.15 lb/hr or 0.65 TPY. These emissions are based on 8,760 operating hours per year, FIRE emission factor, and a control efficiency of 99.0%.

Periodic Monitoring

- **Particulate Matter/ Opacity Emissions:**

1. The facility shall perform a visual check, once per day, of the baghouse stack associated with these units. This check shall be performed by a person familiar with Method 9. If instantaneous visible emissions in excess of 10% opacity are observed, and are not corrected within a period of 1 hour, then a Method 9 must be performed within 4 hours of the observations. Maintenance shall be performed as needed. Any repairs or observed problems shall be recorded.

2. A properly maintained and operated device will be utilized to measure the pressure differential across the baghouse. The facility shall establish a normal operating pressure range and shall monitor and record the pressure drop across the baghouse once per day.

3. The facility shall perform a weekly inspection of the baghouse to verify proper operation. The following activities shall be performed.

   (a) Once per week check hopper, fan and cleaning cycle for proper operation.
   (b) Once per week a visual check of all hoods and ductwork.

4. The facility shall perform an annual inspection of the baghouse to verify proper operation. The following activities shall be performed.

   (a) Once per year inspect baghouse structure, access doors, door seals, and bags.

   (b) Once per year perform an internal inspection of the baghouse hoppers.

Recordkeeping and Reporting

1. The record keeping and reporting requirements are listed in Table 2 of Compliance Assurance Monitoring for the Two (2) Pangborns and One (1) Wheelabrator shotblast.

40 CFR Part 64

2. Records showing the monthly and rolling 12-month total of castings processed through the shotblasts shall be kept in a form suitable for inspection for a period of at least five (5) years following the processing of the casting. Records must reflect the types and amounts of the castings through the shotblasts.

Rule 335-3-16-.05

Compliance Assurance Monitoring (CAM)

The Two Pangborn Shotblasts and the One Wheelabrator Shotblast are subject to Compliance Assurance Monitoring (CAM); they have the pre-controlled potential to emit a pollutant in amounts that would exceed major source threshold. See the Appendix-Table 2 for the facility's CAM plan.

The Eight Grinding Stations do not have the potential pre-control particulate matter emissions greater than the major source amount. CAM is not applicable to these units for the particulate matter emissions.

Note: The Eight GFD Grinders are not subject to CAM but will be using the same Appendix-Table 2 requirements that the Pangborns and Wheelabrator are subject to because the Monitoring and Record Keeping Requirements under Rule 335-3-16-.05 are the same as the requirements in the CAM Plan for the Pangborns and Wheelabrator.

Coating Operations to include; two (2) Spray Booths, GFD Dip Line, Disa Dip Line, Disa Gland Dip Line and Touch Up Spray Booth (Spray Booths EP013A, EP014A & EP015A)(Dip Lines EP013B, EP014B & EP015B)

Note: The coating operations (Spray Booth & Dip lines) includes both Water-Based Asphalt Emulsion and Solvent-Based Asphalt Cutback Coatings, both listed below with applicable requirements. The Touch-up Spray Booth requirements are also listed separately below.

Coating Operations ((2) Spray Booths & (3) Dip Lines using Solvent-Based Asphalt Cutback Coatings)(Spray Booths EP013A & EP014A) (Dip Lines; Disa Dip EP013B, Disa Gland EP014B & GFD Dip EP015B)

Emission Standards

- **Volatile Organic Compound Emissions Standard:**

Volatile organic compound emissions from this unit shall not exceed the Anti-PSD limit of 37.0 tons per year.

ADEM Admin. Code R. 335-3-14-.04 (Anti-PSD)

- **Organic Hazardous Air Pollutant (HAP) Emissions Standard**

  Each affected source as defined in §63.3882 must limit organic hazardous air pollutant emissions to no more than 0.31 kg (2.6 lb) per liter (gallon) coating solids used during each 12-month compliance period.

  40 CFR §63.3890 (b) (1) Subpart MMMM

Expected Emissions

- **Volatile Organic Compound Emissions:**

The expected volatile organic compound emissions from this process are 1.02 lbs/hr (4.47 TPY). This is based on the maximum amount used and all VOC's emitted.

Periodic Monitoring

- **Volatile Organic Compound Emissions:**

1. Monthly and rolling 12-month total emissions of volatile organic compounds, including both paint and thinner will be calculated and recorded. Each record must be maintained for at least 5 years. These records will contain the following information:

   a. The type and quantity of each VOC containing material used during each calendar month.
   b. The VOC content by weight of each coating used as determined by EPA Reference Method 24 or by a method approved in writing by ADEM in advance of its use.
   c. The amount of VOC's emitted each month expressed in units of pounds and tons.
   d. The consecutive 12 month rolling total of all VOC's and emitted in units of pounds and tons.

- **Organic Hazardous Air Pollutant (HAP) Emissions**

  1. If demonstrating compliance with a control device, this unit must comply with the emissions monitoring standards as set forth in 40 CFR 63.3968 Subpart MMMM.

     40 CFR 63.3968 Subpart MMMM

Recordkeeping and Reporting:

1. The facility must comply with the applicable notification, record, and reporting requirements specified in 63.3910, 63.3920, 63.3930, and 63.3931 of 40 CFR 63 Subpart MMMM.

   40 CFR 63.3910, 63.3920, 63.3930, and 63.3931 Subpart MMMM

Compliance Assurance Monitoring (CAM)

These operations do not have the potential pre-control emissions greater than the major source amount. Therefore, CAM is not applicable to this operation.

Touch Up Paint Spray Booth (EP015A)

Emissions Standards

- **Volatile Organic Compound Emissions Standard:**

  This source is subject to no additional specific requirements other than those listed in the General Provisos.

- **Organic Hazardous Air Pollutant (HAP) Emissions Standard**

  Each affected source as defined in §63.3882 must limit organic hazardous air pollutant emissions to no more than 0.31 kg (2.6 lb) per liter (gallon) coating solids used during each 12-month compliance period.

  40 CFR §63.3890 (b) (1) Subpart MMMM

Expected Emissions

- **Volatile Organic Compound Emissions:**

  The expected volatile organic compound emissions from this unit are 1.41 lbs/hr (6.17 TPY). This is based on the maximum amount used and all VOC's emitted.

- **Hazardous Air Pollutants Emissions:**

  The expected hazardous air pollutants emissions from this unit are 0.18 lbs/hr (0.77 TPY). This is based on the maximum amount used and all HAP's emitted.

Periodic Monitoring:

- **Volatile Organic Compound Emissions:**

  This source is subject to no additional specific requirements other than those listed in the General Provisos.

- **Organic Hazardous Air Pollutant (HAP) Emissions**

  1. If demonstrating compliance with a control device, this unit must comply with the emissions monitoring standards as set forth in 40 CFR 63.3968 Subpart MMMM.

     40 CFR 63.3968 Subpart MMMM

Recordkeeping and Reporting:

1. The facility must comply with the applicable notification, record, and reporting requirements specified in 63.3910, 63.3920, 63.3930, and 63.3931 of 40 CFR 63 Subpart MMMM.

   40 CFR 63.3910, 63.3920, 63.3930, and 63.3931 Subpart MMMM

Compliance Assurance Monitoring (CAM)

This unit does not have the potential pre-control emissions greater than the major source amount. Therefore, CAM is not applicable to this unit.

Coating Operations (Spray Booths & Dip Lines using Water-Based Asphalt Emulsion Coatings)(Spray Booths EP013A & EP014A) (Dip Lines; Disa Dip EP013B, Disa Gland EP014B & GFD Dip EP015B)

Emissions Standards:

- **Volatile Organic Compound Emission Standard**

  This source when using water-based emulsion paint is subject to no additional specific requirements other than those listed in the General Permit Provisos.

- **Organic Hazardous Air Pollutant (HAP) Emissions Standard**

  Each affected source as defined in §63.3882 must limit organic hazardous air pollutant emissions to no more than 0.31 kg (2.6 lb) per liter (gallon) coating solids used during each 12-month compliance period.

  40 CFR §63.3890 (b) (1) Subpart MMMM

Expected Emissions:

The expected VOC emissions from this unit will come from the use of any thinners, cleaners or solvents that may be used in the process and will be accounted for on a pound for pound basis. The actual paint used in the process contains no VOC.

Periodic Monitoring:

Based on the level of expected VOC emissions from this unit, the following requirements would represent periodic monitoring for the coating Operations.

- **Volatile Organic Compound Emission**

  1. The facility shall monitor and records the monthly and twelve (12) month rolling total paint and thinner usage in a form suitable for inspection for a period of at least five (5) years following the usage of the material.

  2. The facility shall monitor and record the VOC content of each paints used at the facility in a form suitable for inspection for a period of at least five (5) years following the usage of the material.

- **Organic Hazardous Air Pollutant (HAP) Emissions**

    1. If demonstrating compliance with a control device, this unit must comply with the emissions monitoring standards as set forth in 40 CFR 63.3968 Subpart MMMM.

        40 CFR 63.3968 Subpart MMMM

Recordkeeping and Reporting:

1. The facility must comply with the applicable notification, record, and reporting requirements specified in 63.3910, 63.3920, 63.3930, and 63.3931 of 40 CFR 63 Subpart MMMM.

    40 CFR 63.3910, 63.3920, 63.3930, and 63.3931 Subpart MMMM

Compliance Assurance Monitoring (CAM)

This unit does not have the potential pre-control emissions greater than the major source amount. Therefore, CAM is not applicable to this unit.

Scrap Handling (EP001)

Emissions Standards:

- **Particulate Matter Emission Standard**

    This source is subject to no additional specific requirements other than those listed in the General Permit Provisos.

Expected Emissions:

- **Particulate Matter Emissions**

    Expected particulate emissions from this unit are 2.80 lb/hr or 6.30 TPY. This is based on AP-42 emissions factors and 4500 operating hours per year.

Periodic Monitoring:

- **Opacity Emissions**

    This facility must prepare and operate, at all times, according to a written plan for the selection and inspection of iron and steel scrap to

minimize, to the extent practicable, the amount of organics and HAP metals present in the charge materials used by the iron and steel foundry. This scrap selection and inspection plan is subject to approval by the Administrator and must be kept onsite, available to all plant personnel with materials acquisition or inspection duties. This plan must include information specified in 63.7700.

40 CFR §63.7700 Subpart EEEEE

Recordkeeping and Reporting:

1. The Permittee must comply with the work practice standards in §63.7700(b) and (c), as applicable.

40 CFR §63.7700 Subpart EEEEE

Compliance Assurance Monitoring (CAM)

This unit does not have a control device. This unit would not be subject to CAM.

Emergency Diesel Fired Water Suppression System (209 HP) (EP020)

Emissions Standards:

- **Particulate Matter Emission Standard**

1. The Permitee must comply with Emission standards for Stationary Fire Pump Engines as specified in §60.4202(d) and §60.4205(c) and table 4.

40 CFR §60.4202 and §60.4205 Subpart IIII

2. The Permitee of a stationary CI ICE must comply with the fuel requirements as specified in §60.4207(a) and (b) which requires the use of diesel fuel that meets the requirements of 40CFR 80.510(b).

40 CFR §60.4207 Subpart IIII

Expected Emissions:

- **Particulate Matter Emissions**

Expected particulate emissions from this unit are 0.16 TPY. This is based on AP-42 emissions factors and 8760 operating hours per year.

Periodic Monitoring:

- **Emissions Monitoring**

1. The Permittee or operator of an emergency stationary CI ICE that does not meet standards applicable to non-emergency engines, you must install a non-resettable hour meter prior to start-up.

Recordkeeping and Reporting:

1. The Permittee shall record and maintain records of operation of the emergency and non-emergency service that are recorded through the non-resettable hour meter in accordance with 40 CFR §60.4214(b).

2. If the stationary CI ICE is equipped with a diesel particulate filter, the Permittee must keep records of any corrective action taken after the backpressure monitor has notified the Permittee that the high backpressure limit has been approached as specified in 40 CFR §60.4214(c).

3. If you own or operate an emergency stationary CI ICE with a maximum engine power more than 100 HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §60.4211(f)(2)(ii) an (iii) or that operates for the purpose specified in §60.4211(f)(3)(i), the Permittee must submit an annual report according to the requirements in paragraphs (d)(1) through (3) of this section.

40 CFR §60.4214 (b-d) Subpart IIII

Compliance Assurance Monitoring (CAM)

This unit does not have a control device. This unit would not be subject to CAM.

Sand Reclamation System with Two Baghouses, Lump Reducer, Thermal Reclaimer Unit, Fluidized Bed Cooler, Two Storage Silos and Two Mechanical Grinding Processes (EP018 & EP019)

Emissions Standards:

- **Particulate Matter Emission Standard**

  Particulate matter emissions from the Thermal Reclaimer Unit shall not exceed 0.040 gr/dscf.

  40 CFR §63.732 (a) Subpart UUU

- **Opacity Standard:**

  This source shall not emit particulate matter of opacity of more than 10% unless the emissions are discharged from and affected facility using A wet scrubbing control device.

  40 CFR §63.732 (b) Subpart UUU

Expected Emissions:

- Expected particulate emissions from this unit are 0.54 lb/ton of sand, (Sand Preparation; Uncontrolled: FIRE v. 6.23 for SCC 3-040-003050).

Periodic Monitoring:

- **Particulate Matter/ Opacity Emissions:**

  1. The owner operator of an affected facility subject to the provisions of Subpart UUU who uses a dry control device to comply with the mass emission standard shall install, calibrate, maintain, and operate a continuous monitoring system to measure and record the opacity of emissions discharged into the atmosphere from the control device.

  2. In lieu of a continuous monitoring opacity monitoring system, the owner operator may have a certified visible emissions observer measure and record three 6-minute averages of the opacity of visible emissions to the atmosphere each day of operation in accordance to Method 9 of appendix A of Part 60.

     40 CFR §63.736 (a & b) Subpart UUU

Recordkeeping and Reporting:

1. The Permittee must maintain records and measurements required in §63.734 of the subpart for at least two years.

2. The owner or operator shall submit written reports semi-annually of exceedances of the control device operating parameters required to be monitored by §63.734 of this subpart. An exceedance is defined as all 6-minute periods during which the average opacity from the dry control device exceeds 10%.

40 CFR §63.734 (a & b) Subpart UUU

Compliance Assurance Monitoring (CAM)

This unit does not have the potential pre-control emissions greater than the major source amount. Therefore, CAM is not applicable to this unit.

Green House Gases:

Tyler Union Foundry's Potential Maximum GHG's are primarily the direct result from the combustion of Coke and Natural Gas. The Annual CO_2 from the combustion of coke was calculated at 22,434.58 tons and the combustion from Natural Gas was calculated at 3,713 tons. The combine facility total of GHG's is 26,147.58 tons.

Recommendations:

I recommend that a renewal Major Source Operating Permit be issued to Tyler Union Foundry Company located in Anniston, Alabama.

Paul J. Vaccaro
Paul J. Vaccaro
Industrial Mineral Section
Energy Branch
Air Division

January 5, 2016
Date

Compliance Assurance Monitoring (CAM) Plans

Tyler Union Foundry Company

Anniston, AL

1. Introduction

Compliance Assurance Monitoring (CAM) is intended to provide a reasonable assurance of compliance with applicable requirements under the Clean Air Act (CAA) for large emission units that rely on pollution control device equipment to achieve compliance. Monitoring is conducted to determine that control measures, once installed or otherwise employed, are properly operated and maintained so that they continue to achieve a level of control that complies with applicable requirements.

The United States Environmental Protection Agency (USEPA) regulations implementing CAM can be found in 40 CFR. Part 64. CAM applicability is determined on a pollutant-specific basis. According to these regulations, an emission unit that meets all of the following criteria is subject to CAM:

(1) The unit is located at a major source that is required to obtain Part 70 or 71 permit;
(2) The unit is subject to an emission limitation or standard for the applicable pollutant;
(3) The unit uses a control device (as defined by 40 CFR. 64.1) to achieve compliance;
(4) The potential pre-controlled emissions of an applicable pollutant from the unit are at least 100 percent of the major source threshold for that pollutant; and
(5) The unit is not otherwise exempted by the CAM regulations.

There are seven sources of emissions at the Tyler Union Foundry Company (TUFCO) facility that are required to implement CAM: GFD Shakeout (for PM emissions), DISA 250C Sand Handling (for PM emissions), GFD Sand Handling (for PM/PM_{10} emissions) DISA 250C Pangborn Shotblast (for PM emissions) and the three (3) GFD Shotblast units (for PM emissions). The seven sources are controlled by four baghouse units, as described in the table below.

Table 1

Emission Unit Description	Emission Point Description	Control Device
GFD Shotblast #1	EP 003	GFD Grinding Baghouse
GFD Shotblast #2	EP 003	GFD Grinding Baghouse
GFD Shotblast #3	EP 003	GFD Grinding Baghouse
GFD Shakeout	EP 005	GFD Molding Baghouse
GFD Sand Handling	EP 005	GFD Molding Baghouse
DISA 250C Sand Handling	EP 006	DISA Molding Baghouse
DISA 250C Wheelabrator Shotblast	EP 007	DISA Finishing Baghouse

The remainder of this appendix contains the monitoring approach that satisfy's CAM for PM/PM_{10} emissions from these sources.

Table 2

Monitoring Approach for GFD Grinding Baghouse (EP 003)

	Indicator No. 1	Indicator No. 2	Indicator No. 3
I. Indicator	Pressure drop	Visible Emissions (VE)	Inspection/maintenance
Measurement Approach	Pressure drop through the baghouse is measured once per day using a differential pressure gauge.	Visual checks will be performed once per day, weather permitting, of the baghouse stack by a person familiar with Method 9.	Daily, weekly and annual inspections; maintenance performed as needed.
II. Indicator Range	The indicator range is a pressure drop between 1 and 5 inches H_2O. Excursions trigger an inspection, corrective action, and reporting requirement.	If VE are observed in excess of 10% opacity, and not corrected within a period of 1 hour, then a Method 9 must be performed within 4 hours of the observation.	An excursion is defined as failure to perform daily, weekly or annual inspections.
III. Performance Criteria			
A. Data Representativeness	Pressure drop across the baghouse is measured at the baghouse inlet and exhaust. The minimum accuracy of the device is ±0.5 inches H_2O	Visual checks are performed at the baghouse stack outlet.	Inspections are performed both the internal and external structures of the baghouse.
B. Verification of Operational Status	Conducted as part of weekly inspection.	Conducted as part of daily inspection.	Not applicable.
C. QA/QC Practices and Criteria	Pressure gauge calibrated annually.	Person conducting the VE checks are familiar with Method 9.	Qualified personnel perform inspection.
D. Monitoring Frequency	Pressure drop is measured daily.	VE readings are taken daily, weather permitting.	Daily, Weekly and Annual inspections.
Data Collection Procedure	The pressure drop is recorded on the daily air inspection checklist.	The VE reading is recorded on the daily air inspection checklist.	Records are maintained to document the weekly inspections and any required maintenance.
Averaging Period	No average is taken.	No average is taken.	Not applicable.

Table 3

Monitoring Approach for GFD Molding Baghouse (EP 005)

	Indicator No. 1	Indicator No. 2	Indicator No. 3
I. Indicator	Pressure drop	Visible Emissions (VE)	Inspection/maintenance
Measurement Approach	Pressure drop through the baghouse is measured once per day using a differential pressure gauge.	Visual checks will be performed once per day, weather permitting, of the baghouse stack by a person familiar with Method 9.	Daily, weekly and annual inspections; maintenance performed as needed.
II. Indicator Range	The indicator range is a pressure drop between 1 and 5 inches H_2O. Excursions trigger an inspection, corrective action, and reporting requirement.	If VE are observed in excess of 10% opacity, and not corrected within a period of 1 hour, then a Method 9 must be performed within 4 hours of the observation.	An excursion is defined as failure to perform daily, weekly or annual inspections.
III. Performance Criteria			
A. Data Representativeness	Pressure drop across the baghouse is measured at the baghouse inlet and exhaust. The minimum accuracy of the device is ±0.5 inches H_2O	Visual checks are performed at the baghouse stack outlet.	Inspections are performed both the internal and external structures of the baghouse.
B. Verification of Operational Status	Conducted as part of weekly inspection.	Conducted as part of daily inspection.	Not applicable.
C. QA/QC Practices and Criteria	Pressure gauge calibrated annually.	Person conducting the VE checks are familiar with Method 9.	Qualified personnel perform inspection.
D. Monitoring Frequency	Pressure drop is measured daily.	VE readings are taken daily, weather permitting.	Daily, Weekly and Annual inspections.
Data Collection Procedure	The pressure drop is recorded on the daily air inspection checklist.	The VE reading is recorded on the daily air inspection checklist.	Records are maintained to document the weekly inspections and any required maintenance.
Averaging Period	No average is taken.	No average is taken.	Not applicable.

Table 4

Monitoring Approach for DISA Molding Baghouse (EP 006)

	Indicator No. 1	Indicator No. 2	Indicator No. 3
I. Indicator	Pressure drop	Visible Emissions (VE)	Inspection/maintenance
Measurement Approach	Pressure drop through the baghouse is measured once per day using a differential pressure gauge.	Visual checks will be performed once per day, weather permitting, of the baghouse stack by a person familiar with Method 9.	Daily, weekly and annual inspections; maintenance performed as needed.
II. Indicator Range	The indicator range is a pressure drop between 1 and 5 inches H_2O. Excursions trigger an inspection, corrective action, and reporting requirement.	If VE are observed in excess of 10% opacity, and not corrected within a period of 1 hour, then a Method 9 must be performed within 4 hours of the observation.	An excursion is defined as failure to perform daily, weekly or annual inspections.
III. Performance Criteria			
A. Data Representativeness	Pressure drop across the baghouse is measured at the baghouse inlet and exhaust. The minimum accuracy of the device is ±0.5 inches H_2O	Visual checks are performed at the baghouse stack outlet.	Inspections are performed both the internal and external structures of the baghouse.
B. Verification of Operational Status	Conducted as part of weekly inspection.	Conducted as part of daily inspection.	Not applicable.
C. QA/QC Practices and Criteria	Pressure gauge calibrated annually.	Person conducting the VE checks are familiar with Method 9.	Qualified personnel perform inspection.
D. Monitoring Frequency	Pressure drop is measured daily.	VE readings are taken daily, weather permitting.	Daily, Weekly and Annual inspections.
Data Collection Procedure	The pressure drop is recorded on the daily air inspection checklist.	The VE reading is recorded on the daily air inspection checklist.	Records are maintained to document the weekly inspections and any required maintenance.
Averaging Period	No average is taken.	No average is taken.	Not applicable.

Table 5

Monitoring Approach for DISA Finishing Baghouse (EP 007)

		Indicator No. 1	Indicator No. 2	Indicator No. 3
I.	Indicator	Pressure drop	Visible Emissions (VE)	Inspection/maintenance
	Measurement Approach	Pressure drop through the baghouse and afterfilter are measured once per day using a differential pressure gauge.	Visual checks will be performed once per day, weather permitting, of the baghouse stack by a person familiar with Method 9.	Daily, weekly and annual inspections; maintenance performed as needed.
II.	Indicator Range	The indicator range is a pressure drop between 1 and 5 inches H_2O. Excursions trigger an inspection, corrective action, and reporting requirement.	If VE are observed in excess of 10% opacity, and not corrected within a period of 1 hour, then a Method 9 must be performed within 4 hours of the observation.	An excursion is defined as failure to perform daily, weekly or annual inspections.
III.	Performance Criteria			
	A. Data Representativeness	Pressure drop across the baghouse and afterfilter are measured at the baghouse inlet and exhaust. The minimum accuracy of the device is ±0.5 inches H_2O	Visual checks are performed at the baghouse stack outlet.	Inspections are performed both the internal and external structures of the baghouse.
	B. Verification of Operational Status	Conducted as part of weekly inspection.	Conducted as part of daily inspection.	Not applicable.
	C. QA/QC Practices and Criteria	Pressure gauge calibrated annually.	Person conducting the VE checks are familiar with Method 9.	Qualified personnel perform inspection.
	D. Monitoring Frequency	Pressure drop and hours of operation of afterfilter are measured daily.	VE readings are taken daily, weather permitting.	Daily, Weekly and Annual inspections.
	Data Collection Procedure	The pressure drop is recorded on the daily air inspection checklist. Date and time of operation of the afterfilter is recorded in a logbook.	The VE reading is recorded on the daily air inspection checklist.	Records are maintained to document the weekly inspections and any required maintenance.
	Averaging Period	No average is taken.	No average is taken.	Not applicable.